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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,497	01/23/2004	Nobuhiro Miyakawa	Q79568	5233
23373	7590	05/19/2006	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			BRASE, SANDRA L	
			ART UNIT	PAPER NUMBER
			2852	

DATE MAILED: 05/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/762,497

Applicant(s)

MIYAKAWA ET AL.

Examiner

Sandra L. Brase

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 13-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 13-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Terminal Disclaimer***

1. The terminal disclaimer filed on 3/6/06 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of Application Number 10/751,306 has been reviewed and is NOT accepted.

- a. The person who signed the terminal disclaimer is not recognized as an officer of the assignee, and he/she has not been established as being authorized to act on behalf of the assignee. See MPEP § 324.

2. An attorney or agent, not of record, is not authorized to sign a terminal disclaimer in the capacity as an attorney or agent acting in a representative capacity as provided by 37 CFR 1.34

(a). See 37 CFR 1.321(b) and/or (c).

3. It should be noted that applicant is not required to pay another disclaimer fee as set forth in 37 CFR 1.20(d) when submitting a replacement or supplemental terminal disclaimer.

### ***Double Patenting***

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

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A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1, 7-11, 13, 14, 19-20 and 23; 2; 3, 5 and 15-17; 4; and 18 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 3; 4; 8; 7; and 9, respectively, of copending Application No. 10/751306 in view of Miyakawa et al. (EP 1271251 A1) and Hara (JP 2001-1666605).
6. The method of claims 3; 4; 8; 7 and 9 of copending Application No. 10/751/306 makes obvious the apparatus limitations of claims 1, 7-11, 13, 14, 19-20 and 23; 2; 3, 5 and 15-17; 4; and 18, respectively, of the current application except that the intermediate transfer medium contains an ion-conductive substance and has a work function smaller than the work function of each of the toners, the composition of the toners, the intermediate transfer medium is a belt, the transfer medium is paper, and the process cartridge. Miyakawa et al. (...251 A1) disclose the intermediate transfer medium has a work function smaller than the work function of the toners (abstract; and [0095]-[0098]). It would have been obvious to one of ordinary skill in the art at the time of the invention for the intermediate transfer medium to have a work function smaller than the work function of each of the toners, as disclosed by Miyakawa et al. (...251 A1), so that transfer efficiency can be improved. Miyakawa et al. (...251 A1) disclose the toners contain hydrophobic silicon dioxide particles and hydrophobic titanium dioxide as flowability improvers ([0077]-[0078]), the toners having a roundness of 0.94-1.00 ([0072]), a particle diameter of 4-10 $\mu$ m ([0075]), the toners are formed by polymerizing a monomer in the presence of a colorant

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([0065]-[0071]), and the toners have a work function of 5.4-5.9 eV ([0016]). It would have been obvious to one of ordinary skill in the art at the time of the invention to have the claimed toner composition, as disclosed by Miyakawa et al. (...251 A1), since such a toner is well known in the art to develop latent images. Miyakawa et al. (...251 A1) disclose the intermediate transfer medium is a belt (30) (figure 4) and the toner images transferred to the intermediate transfer medium is then transferred to paper (P) ([0124]). It would have been obvious to one of ordinary skill in the art at the time of the invention for the intermediate transfer medium to be a belt and the transfer medium is paper, as disclosed by Miyakawa et al. (...251 A1), since it is well known in the art for an intermediate transfer medium to be a belt and for a transfer medium to be paper. Miyakawa et al. (...251 A1) further disclose an image forming apparatus wherein each of the developing devices for respective colors has been united with the corresponding latent image holding member to constitute a removable cartridge (40) ([0021]-[0023] and figure 4). It would have been obvious to one of ordinary skill in the art at the time of the invention to have the claimed cartridge, as disclosed by Miyakawa et al. (...251 A1), so as to provide ease in maintenance. Hara (...605) discloses an intermediate transfer medium including an ion-conductive material (abstract). It would have been obvious to one of ordinary skill in the art at the time of the invention to have the intermediate transfer medium contain an ion-conductive material, as disclosed by Hara (...605), since such an intermediate transfer medium has improved uniformity of electric resistance, free of dependence on electric fields, and less changed in electric resistance by environment.

This is a provisional obviousness-type double patenting rejection.

7. Claims 6 and 21 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 3 of copending Application No.

10/751,306 in view of Miyakawa et al. (EP 1271251 A1), Hara et al. (JP 2001-166605) and Tokimatsu et al. (JP 11-231692).

8. The method of claim 3 in view of Miyakawa et al. (...251 A1) and Hara et al. (...605) makes obvious the apparatus limitations of claims 6 and 21, except the claimed transfer power sources. Tokimatsu et al. (...692) disclose a constant-voltage power source for supplying a transfer voltage to perform a toner image transfer onto an intermediate transfer medium and a constant-current power source serving as a power source for a second transfer of the toner image from the intermediate transfer medium to a recording medium (abstract). It would have been obvious to one of ordinary skill in the art at the time of the invention to have the claimed respective transfer power sources, as disclosed by Tokimatsu et al. (...692) so as to excellently perform the transfer of a toner image.

This is a provisional obviousness-type double patenting rejection.

### ***Response to Arguments***

Applicant's arguments filed 3/6/06 have been fully considered but they are not persuasive.

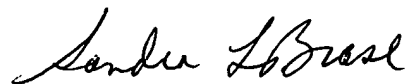
The terminal disclaimer filed 3/6/06 has not been approved hence, as explained above, the claims remain rejected under double patenting with copending application 10/751,306.

***Inquiry***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sandra L. Brase whose telephone number is (571) 272-2131.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur T. Grimley, can be reached on (571) 272-2136. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Sandra L. Brase  
Primary Examiner  
Art Unit 2852

May 12, 2006